

REMARKS

Claims 1, 3-20 and 22-30 are pending in this application. By this Amendment, claims 1, 3-15, 18-20 and 22-28 are amended. Claims 29 and 30 are added. Claims 2 and 21 are canceled without prejudice to, or disclaimer of, the subject matter recited in those claims. The amendments to the claims and the added claims introduce no new matter as they are supported by the specification and claims as originally filed. The amendments better clarify the subject matter recited in the claims, without narrowing the claims. The attached Substitute Specification corrects multiple informalities, which Applicants discovered on review of this application. The amendments to the specification add no new matter as they are generally administrative to correct, for example, misspellings. Reconsideration of the application in light of the above amendments and the following remarks is respectfully requested.

Applicants appreciate the courtesies shown to Applicants' representative by Examiner Khan in the August 10, 2005 telephone interview. Applicants' separate record of the substance of the interview is incorporated into the following remarks.

The Office Action, in paragraph 2, rejects claims 1-28 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/0003872 to Brinkley et al. (hereinafter "Brinkley") in view of International Patent Publication No. WO 01/03437 (hereinafter "the '437 reference"). This rejection is respectfully traversed.

Brinkley teaches a method for wirelessly communicating data between a plurality of avionics units on an aircraft and a data communication apparatus (Abstract). With reference to Fig. 1, Brinkley teaches an aircraft avionics system 10 comprising a number of discrete components including a multifunction control display unit (MCDU) 18 (paragraph [0029]). Brinkley's aircraft avionics system 10 supports communications between the aircraft and a data communications apparatus 12, suitable devices for which may include airport ground

service terminals and wireless hand-held devices such as Internet-enabled cell-phones, pilot access terminals, and electronic flight bags (EFBs) (paragraph [0028]). The Brinkley system may include an antenna 38 inside the aircraft to provide access for portable data communication apparatus onboard the aircraft, such as those used by maintenance personnel (paragraph [0030]).

The Brinkley device is intended to overcome a shortfall in the ability of hard-wired devices to upload and download the volume of data that may be required to periodically update flight management computers (see paragraph [0003]) or to download aircraft data into avionics line replaceable units, for example, for post-flight review of the data (see paragraph [0013]). The Brinkley device therefore provides a method for wirelessly communicating, for example, download data between an avionics unit and a data communication apparatus via the aircraft data services link (see paragraph [0016]).

One of ordinary skill in the art would recognize that Brinkley is limited to applications regarding the above-described upload and download of avionics data and/or flight performance data. Specifically, Brinkley teaches that "data transferred to and from the disclosed data communication apparatus includes software uploads and downloads, flight performance data, and applications for use by flight crew, cabin crew, maintenance crew, airport grounds service and airline operations" (paragraph [0029]). In all of the disclosed embodiments, communication occurs between at least one avionics unit and the disclosed data communication apparatus. In other words, the avionics unit is the transceiver at one end of the disclosed communication link. The avionics unit is not used in Brinkley for transferring information received from one data communication apparatus, whether located on the aircraft or not, to another data communication apparatus. Additionally, Brinkley cannot be reasonably considered to suggest such a capability.

The '437 reference teaches a wireless observation system for aircraft using a video apparatus mounted on the aircraft to capture images and transmit images to the cockpit for use in observing parts of the aircraft that cannot be seen from the cockpit (Abstract). With reference to Figs. 1 and 2, a plurality of cameras 30A-30F may be mounted on the exterior or the interior of an aircraft (page 4, lines 18-19), for example, to make up for the loss of a third cockpit crew member who is no longer available to move about the aircraft to investigate difficulties and/or to make visual appraisals of aircraft conditions (page 1, lines 11-15). Receiver and control assemblies can be located in the cockpit for use by the crew, or a receiver can be mounted remotely from the cockpit, for example, in the tail section. The disclosed system contemplates the use of a portable self-contained video receiver-controller assembly for use onboard the aircraft or by ground crew (page 7, lines 12-17). The '437 reference makes no provision for other transmission of the video data to any remote receiving node such as, for example, a remote operation center. Nor is there any suggestion in the '437 reference that the observation capability should be in any way employed for other-than-real-time on aircraft observation.

A. There Is No Evidence Of A Motivation To Combine The Applied References

Brinkley and the '437 reference are not combinable in the manner proposed by the Office Action for at least the following reason. MPEP §2143.01 instructs that "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination."

MPEP §2143.01 further instructs that "[a]lthough a prior art device 'may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.'" *See also In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir.

1990). Applicant respectfully submits that the rejection of the claims is improper in view of at least MPEP §2143.01 because the Office Action lacks the required specific evidence of a

teaching, suggestion or motivation in the prior art for one of ordinary skill to combine the references.

In other words, the Office Action appears to rely on improper hindsight reasoning based on Applicants' disclosure in attempting to find the subject matter recited in at least independent claims 1 and 11 obvious in view of the prior art. There is simply no motivation in the avionics data upload and download device taught by Brinkley for combining a capability for real-time video observation of portions of an aircraft that are not directly observable from the cockpit with a device such as that taught by the '437 reference, despite the assertions to the contrary in the Office Action.

The above argument was presented to Examiner Khan during the August 10 telephone interview. The Examiner indicated his belief that the references were combinable. Applicants respectfully submit that the purported motivation stated in the Office Action, i.e., "observing those parts of the aircraft that cannot be seen from the cockpit," is nowhere suggested to be a shortfall of, for example, the Brinkley device.

B. Any Permissible Combination Of The Applied References Does Not Render Obvious The Subject Matter Recited In The Claims

Furthermore, any permissible combination of the references does not render obvious the following features recited in the enumerated claims. Claim 1 recites, among other features, at least one portable control and display unit that is usable onboard an aircraft to transmit and receive at least one of data communication, voice communication and video communication via an aircraft communication and reporting system transceiver and a VHF radio to and from a remote operations center. Claim 3 recites that the at least one portable control and display unit is configured to transmit the messages from the aircraft while in flight. Claim 4 recites the messages comprise voice communication. Claim 6 recites the messages comprise video communication comprising at least one of a real-time video stream

or single frames of video image. Claim 9 recites that the at least one portable control and display unit onboard the aircraft is configured to function as a cellular telephone. Claim 10 recites that the system further comprises a SATCOM radio. Claim 18 recites at least one panic button located at least one of in or on the aircraft and configured to alert the system of a threat condition. Claim 20 recites employing a portable control and display unit onboard an aircraft to send and receive messages to an ACARS transceiver onboard the aircraft to and from a remote operations center. Claim 22 recites that the portable control and display unit can send and receive messages from another portable control and display unit onboard the aircraft. Claim 23 recites the portable control and display unit sending and receiving positional information concerning the location of the aircraft. Claim 24 recites the positional information further comprising data regarding other aircraft in the vicinity. At least these features, as are variously recited in the enumerated claims, are not suggested by any permissible combination of Brinkley and the '437 reference.

In other words, there is nothing in this combination of references to suggest the use of a portable device such as, for example, the recited at least one portable control and display unit to accomplish any of the above enumerated functions in the manner recited in the claims. Applicants' representative presented the above arguments to Examiner Khan during the August 10 telephone interview. While not agreeing to allow any of the claims based on the arguments presented, the Examiner did not fully rebut any of the arguments and indicated that he would have to further review the arguments when a formal reply was filed.

* * *

In summary, Applicants' representative presented each of the above arguments regarding Applicants' belief that (1) Brinkley does not teach all of the limitations that the Office Action asserts Brinkley to teach, (2) that the motivation to combine Brinkley and the '437 reference is not sufficient, and (3) to the extent that Brinkley and the '437 reference are

combinable, such combination would not have rendered obvious the subject matter recited in the claims. Examiner Khan indicated that he would more fully consider each of Applicants' arguments upon filing of a formal response.

For at least the above reasons, the asserted combination of the applied references is improper, and any arguably permissible combination of the applied references cannot reasonably be considered to teach, or even to have suggested, all of the varying combinations of features recited in claims 1, 3-20 and 22-28.

Accordingly, reconsideration and withdrawal of the rejection of claims 1, 3-20 and 22-28 under 35 U.S.C. §103(a) over the applied references are respectfully requested.

In view of the foregoing, Applicants respectfully submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 3-20 and 22-30 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number set forth below.

Respectfully submitted,



Thomas J. Pardini
Registration No. 30,411

Daniel A. Tanner, III
Registration No. 54,734

TJP:DAT/fpw

Attachments:

Substitute Specification

Marked-up copy of specification as originally filed

Date: August 25, 2005

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

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